

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): A smoking article ~~including~~ comprising:

a tobacco column;

a wrapper surrounding the tobacco column; and

a carbon monoxide pump comprising:

an adsorbent material for adsorbing at least a portion of the carbon monoxide in the smoking article main stream combustion products and subsequently releasing carbon monoxide, thereby creating a flux during an inter puff period from the adsorbent material, wherein the adsorbent material is positioned proximate a smoker's mouthpiece end of the tobacco column so as to selectively divert carbon monoxide from main stream combustion products prior to inhaling by a smoker.  
at least one venting hole proximate the adsorbent material and through which at least a portion of the carbon monoxide adsorbed by the adsorbent material is discharged from the smoking article.

Claim 2 (currently amended): The smoking article according to Claim 1, ~~further including wherein the~~ venting holes adjacent to are formed in a wrapper surrounding the adsorbent material.

Claim 3 (currently amended): The smoking article according to Claim 1, wherein the carbon monoxide pump further comprises a catalyst for oxidizing at least a portion of the carbon monoxide in the main stream combustion products. ~~2, wherein the venting holes facilitate the further diversion of carbon monoxide from main stream smoke.~~

Claims 4 (withdrawn): A carbon monoxide pump for use in a smoking article including a tobacco column and a wrapper surrounding the tobacco column, the carbon monoxide pump including:

an adsorbent for adsorbing carbon monoxide; and  
a catalyst,

wherein when placed adjacent to the tobacco column, the carbon monoxide pump selectively diverts carbon monoxide from main stream combustion products prior by adsorbing carbon monoxide and the catalyst at least partially oxidizes the diverted carbon monoxide to carbon dioxide prior to being inhaled by a smoker.

Claim 5 (withdrawn): The carbon monoxide pump according to Claim 4, wherein the catalyst is at least one of a transition metal, an oxide of a transition metal, and a transition metal and an oxide of a transition metal.

Claim 6 (withdrawn): The carbon monoxide pump according to Claim 5, wherein the transition metal is a rare earth metal.

Claim 7 (withdrawn): The carbon monoxide pump according to Claim 5, wherein the transition metal is a platinum group metal.

Claim 8 (withdrawn): The carbon monoxide pump according to Claim 5, wherein the transition metal is at least one of copper, cobalt, iron, silver, nickel, their alloys, their mixtures and combinations thereof.

Claim 9 (withdrawn): The carbon monoxide pump according to Claim 4, further including at least one additional filter element.

Claim 10 (withdrawn): The carbon monoxide pump according to Claim 9, wherein the additional filter element is cellulose acetate.

Claim 11 (withdrawn): The carbon monoxide pump according to claim 9, wherein at least a portion of the catalyst is distributed through the additional filter element.

Claim 12 (withdrawn): The carbon monoxide pump according to Claim 4, wherein in the vicinity of the adsorbent the concentration of the carbon monoxide is increased thereby increasing the flux of carbon monoxide from the adsorbent.

Claim 13 (withdrawn): The carbon monoxide pump according to Claim 4, wherein the adsorbing is momentary.

Claim 14 (withdrawn): The carbon monoxide pump according to Claim 13, wherein the adsorbing is between about 0.1 and about 10 seconds.

Claim 15 (withdrawn): The carbon monoxide pump according to Claim 4, wherein the adsorbent is a zeolite.

Claim 16 (withdrawn): The carbon monoxide pump according to Claim 4, wherein the adsorbent is an oxide.

Claim 17 (withdrawn): The carbon monoxide pump according to Claim 16, wherein the oxide is an oxide of at least one of silicone, aluminum, magnesium, there mixtures and there compounds.

Claim 18 (withdrawn): The carbon monoxide pump according to Claim 17, wherein the oxide is a dehydrated oxide.

Claim 19 (withdrawn): The carbon monoxide pump according to Claim 18, wherein the dehydrated oxide is an oxide of aluminum.

Claim 20 (withdrawn): The carbon monoxide pump according to Claim 16, wherein the oxide is amorphous.

Claim 21 (withdrawn): The carbon monoxide pump according to Claim 12, wherein the adsorbent is a support for the catalyst.

Claim 22 (currently amended): A smoking article comprising: including:

a tobacco column having a proximal end and a distal end;

a wrapper surrounding the tobacco column;

an adsorbent material for adsorbing at least a portion of the carbon monoxide from the smoking article main stream combustion products, wherein the adsorbent material is in flow communication with the proximal end of the tobacco column proximate a smoker's mouthpiece end of the tobacco column including a metal or metal compound including one of silver, nickel, dysprosium and combinations thereof; and

at least one venting holes adjacent to the adsorbent material, and through which at least a portion of the carbon monoxide adsorbed in the adsorbent material is discharged from the smoking article.

~~wherein the adsorbent material selectively diverts carbon monoxide from main stream combustion products and the venting holes provide an alternative path for the diverted carbon monoxide desorbed from the adsorbent material during an inter puff period to check inhalation by a smoker.~~

Claim 23 (currently amended): The smoking article according to Claim 22, wherein the adsorbent material comprises a metal or metal compound including at least one of silver, nickel or dysprosium, or combinations thereof. ~~venting holes facilitate the further diversion of carbon monoxide from main stream smoke.~~

Claim 24 (currently amended): The smoking article according to claim 23 22, wherein the metal compound is an oxide.

Claim 25 (currently amended): The smoking article according to Claim 23 22, wherein the metal of the metal or metal compound is silver.

Claim 26 (previously presented): The smoking article according to Claim 25, wherein the silver is between about 4 and 10 percent of the adsorbent material.

Claim 27 (currently amended): The smoking article according to Claim ~~23~~ 22, wherein the metal or metal compound is a combination of nickel and dysprosium.

Claim 28 (currently amended): The smoking article according to Claim 22, further including at least one additional filter element proximate the proximal end of the tobacco column. ~~smoker's mouthpiece end.~~

Claim 29 (previously presented): The smoking article according to Claim 28, wherein the additional filter element is cellulose acetate.

Claim 30 (currently amended): The smoking article according to Claim 28, further comprising a catalyst wherein at least a portion of the catalyst is distributed through the additional filter element.

Claim 31: (cancelled).

Claim 32 (currently amended): The smoking article according to Claim 22, wherein the adsorbent material has the propensity for momentarily adsorbing at least a portion of the carbon monoxide in the smoking article main stream combustion products. ~~that the adsorbing is momentary.~~

Claim 34 (currently amended): The smoking article according to Claim ~~64~~ 34, wherein the zeolite has an aperture size ranging from about 3 to 9 angstroms.

Claim 35 (previously presented): The smoking article according to Claim 22, wherein the adsorbent material is an oxide that is operable as the adsorbent.

Claim 36 (currently amended): The smoking article according to Claim 35, wherein the oxide is an oxide of at least one of silicon, aluminum, or magnesium, ~~there or~~ mixtures, ~~and there~~ compounds or combinations thereof.

Claim 37 (previously presented): The smoking article according to Claim 36, wherein the oxide is a dehydrated oxide.

Claim 38 (previously presented): The smoking article according to Claim 37, wherein the dehydrated oxide is an oxide of aluminum.

Claim 39 (previously presented): The smoking article according to Claim 35, wherein the oxide is amorphous.

Claim 40 (currently amended): The smoking article according to Claim 22, wherein the adsorbent material is a ~~support for the~~ catalyst.

Claim 41 (withdrawn): A method for pumping carbon monoxide from the main stream smoke of a smoking article including a tobacco column a wrapper surrounding the tobacco column, said method comprising:

positioning a carbon monoxide pump including an adsorbent for adsorbing carbon monoxide, with respect to the tobacco column so as to selectively divert carbon monoxide from main stream combustion products prior to inhaling by a smoker.

Claim 42 (withdrawn): A method for pumping carbon monoxide from the main stream smoke of a smoking article including a tobacco column a wrapper surrounding the tobacco column, said method comprising the steps of:

providing a carbon monoxide pump including  
an adsorbent for adsorbing carbon monoxide; and  
a catalyst,

wherein when place adjacent to the tobacco column, the carbon monoxide pump selectively diverts carbon monoxide from main stream combustion products prior by adsorbing carbon monoxide and the catalyst at least partially oxidizes the diverted carbon monoxide to carbon dioxide prior to being inhaled by a smoker.

Claim 43 (withdrawn): A method for pumping carbon monoxide from the main stream smoke of a smoking article including a tobacco column a wrapper surrounding the tobacco column, said method comprising the steps of:

providing a carbon monoxide pump including:

an adsorbent for adsorbing carbon monoxide;

a catalyst for oxidizing carbon monoxide to carbon dioxide; and

venting holes adjacent to the adsorbent,

wherein the carbon monoxide pump selectively diverts carbon monoxide from main stream combustion products, the catalyst at least partially oxidizes the carbon monoxide to carbon dioxide and the venting holes provide an alternative path for the diverted carbon monoxide and the oxidized carbon monoxide to check inhalation by a smoker.

Claim 44 (withdrawn): A method for reducing carbon monoxide in main stream smoke of a smoking article that has a tobacco column comprising:

positioning a carbon monoxide pump in the path of the main stream smoke;

combusting the tobacco in the tobacco column;

drawing smoke from the combusting tobacco past the carbon monoxide pump;

adsorbing carbon monoxide from the main stream smoke onto an adsorbent;

catalytically oxidizing carbon monoxide to carbon dioxide at the adsorbent; and

expressing carbon dioxide through venting holes adjacent to the adsorbent.

Claim 45 (withdrawn): A method for reducing carbon monoxide in main stream smoke of a smoking article that has a tobacco column comprising:

positioning a carbon monoxide pump in the path of the main stream smoke;

combusting the tobacco in the tobacco column;

drawing smoke from the combusting tobacco past the carbon monoxide pump;

adsorbing carbon monoxide from the main steam smoke onto an adsorbent;

releasing the carbon monoxide from the adsorbent and expressing carbon monoxide through venting holes adjacent to the adsorbent.

Claim 46 (currently amended): A mouthpiece for a smoking article comprising:

a fitting to receive a smoking article, and

an adsorbent material for adsorbing carbon monoxide, wherein the adsorbent material is positioned with respect to the smoking article so as to selectively divert at least a portion of the carbon monoxide from ~~smoking article~~ main stream combustion products prior to ~~being inhaled~~ ~~inhaling~~ by a smoker by adsorbing carbon monoxide to the adsorbent material, desorbing carbon monoxide ~~desorption~~ from the adsorbent material during an inter-puff period, and discharging carbon monoxide from the smoking article through at least one venting holes adjacent to the adsorbent material.

Claim 47 (currently amended): A mouthpiece for a smoking article comprising:

a fitting to receive a smoking article;

an adsorbent material in the fitting ~~including~~: comprising a metal or metal compound including one of silver, nickel, dysprosium and combinations thereof; and

at least one venting holes adjacent to the adsorbent material,



wherein the adsorbent material selectively diverts at least a portion of the carbon monoxide from the smoking article main stream combustion products by adsorption to and desorption from the adsorbent material and discharge through the venting holes to provide an alternative path for the diverted carbon monoxide to check inhalation by a smoker.

Claim 48 (previously presented): The mouthpiece according to Claim 47, wherein the venting holes facilitate the further diversion of carbon monoxide from main stream smoke.

Claim 49 (previously presented): The mouthpiece according to Claim 47, wherein the metal compound is an oxide.

Claim 50 (previously presented): The mouthpiece according to Claim 47, wherein the metal of the metal or metal compound is silver.

Claim 51 (previously presented): The mouthpiece according to Claim 50, wherein the silver is between about 4 and 10 percent of the adsorbent material.

Claim 52 (previously presented): The mouthpiece according to Claim 47, wherein the metal or metal compound is a combination of nickel and dysprosium.

Claim 53 (previously presented): The mouthpiece according to Claim 47, further including at least one additional filter element proximate the smoker's mouthpiece end.

Claim 54 (previously presented): The mouthpiece according to Claim 53, wherein the additional filter element is cellulose acetate.

Claim 55 (currently amended): The mouthpiece according to Claim 47, wherein the adsorbent material has the propensity for momentarily adsorbing at least a portion of the carbon monoxide in the smoking article main stream combustion products. ~~that the adsorbing is momentary.~~

Claim 56 (currently amended): The mouthpiece according to Claim 55, wherein the adsorbent material momentarily adsorbs at least a portion of the carbon monoxide in the smoking article main stream combustion products for is between about 0.1 and about 10 seconds.

Claim 57 (previously presented): The mouthpiece according to Claim 47, wherein the adsorbent material is a zeolite that is operable as the adsorbent.

Claim 58 (previously presented): The mouthpiece according to Claim 57, wherein the zeolite has an aperture size ranging from about 3 to 9 angstroms.

Claim 59 (previously presented): The mouthpiece according to Claim 47, wherein the adsorbent material is an oxide that is operable as the adsorbent.

Claim 60 (currently amended): The mouthpiece according to Claim 59, wherein the oxide is an oxide of at least one of silicon, aluminum, or magnesium, ~~there~~ or mixtures, ~~and there~~ compounds or combinations thereof.

Claim 61 (previously presented): The mouthpiece according to Claim 60, wherein the oxide is a dehydrated oxide.

Claim 62 (previously presented): The mouthpiece according to Claim 62, wherein the dehydrated oxide is an oxide of aluminum.

Claim 63 (currently amended): The mouthpiece according to Claim 59, wherein the oxide is amorphous.

Claim ~~34~~ 64 (currently amended): The smoking article according to Claim 22, wherein the adsorbent material is a zeolite that is operable as the adsorbent.

Claim 65 (new): The smoking article of Claim 1, wherein the adsorbent material comprises a catalyst for adsorbing and oxidizing at least a portion of the carbon monoxide in the smoking article main stream combustion products.

Claim 66 (new): A smoking article comprising:

a tobacco column;

a wrapper surrounding the tobacco column; and

a carbon monoxide pump comprising an adsorbent material for selectively diverting at least a portion of the carbon monoxide from the smoking article main stream combustion products prior to being inhaled by a smoker, wherein the adsorbent material adsorbs carbon monoxide in the main stream combustion products, desorbs the carbon monoxide during an inter-puff period, and discharges the desorbed carbon monoxide from the smoking article through at least one venting hole proximate the adsorbent material.

Claim 67 (new): The smoking article according to Claim 66, wherein the venting holes are formed in a wrapper surrounding the adsorbent material.

Claim 68 (new): The smoking article according to Claim 67, wherein the wrapper is the wrapper surrounding the tobacco column.

Claim 69 (new): The smoking article according to Claim 66, wherein the carbon monoxide pump further comprises a catalyst for oxidizing at least a portion of the carbon monoxide in the main stream combustion products.

Claim 70 (new): The smoking article according to Claim 66, wherein the adsorbent material comprises a catalyst for adsorbing and oxidizing carbon monoxide in the main stream combustion products.

Claim 71 (new): The smoking article according to Claim 66, wherein the adsorbent material comprises a metal or metal compound including at least one of silver, nickel or dysprosium, or combinations thereof.

Claim 72 (new): The smoking article according to Claim 66, wherein the absorbent material has the propensity for momentarily adsorbing at least a portion of the carbon monoxide in the main stream combustion products.

Claim 73 (new): The smoking article according to Claim 66, wherein the adsorbent material is a zeolite.

Claim 74 (new): The smoking article according to Claim 66, wherein the adsorbent material is an oxide.